

**METHOD AND APPARATUS FOR DYNAMICALLY INSERTING GAIN IN AN  
ADAPTIVE FILTER SYSTEM**

Abstract of the Disclosure

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A method and apparatus for dynamically inserting gain in an adaptive filter is taught.

This selective insertion of gain may be used to allow an adaptive filter to converge more quickly and/or to overcome inherent limitations of the adaptive filter. An echo canceller (e.g. 20 and 22 in FIG. 1) is just one possible use for an adaptive filter having a shorter

10 convergence time. However, virtually all uses of an adaptive filter can benefit from a shorter convergence time and/or improved filtering performance.